

VULNERABILITY TO INCOME POVERTY: TRENDS FROM 2003 TO 2015

By

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Presented by

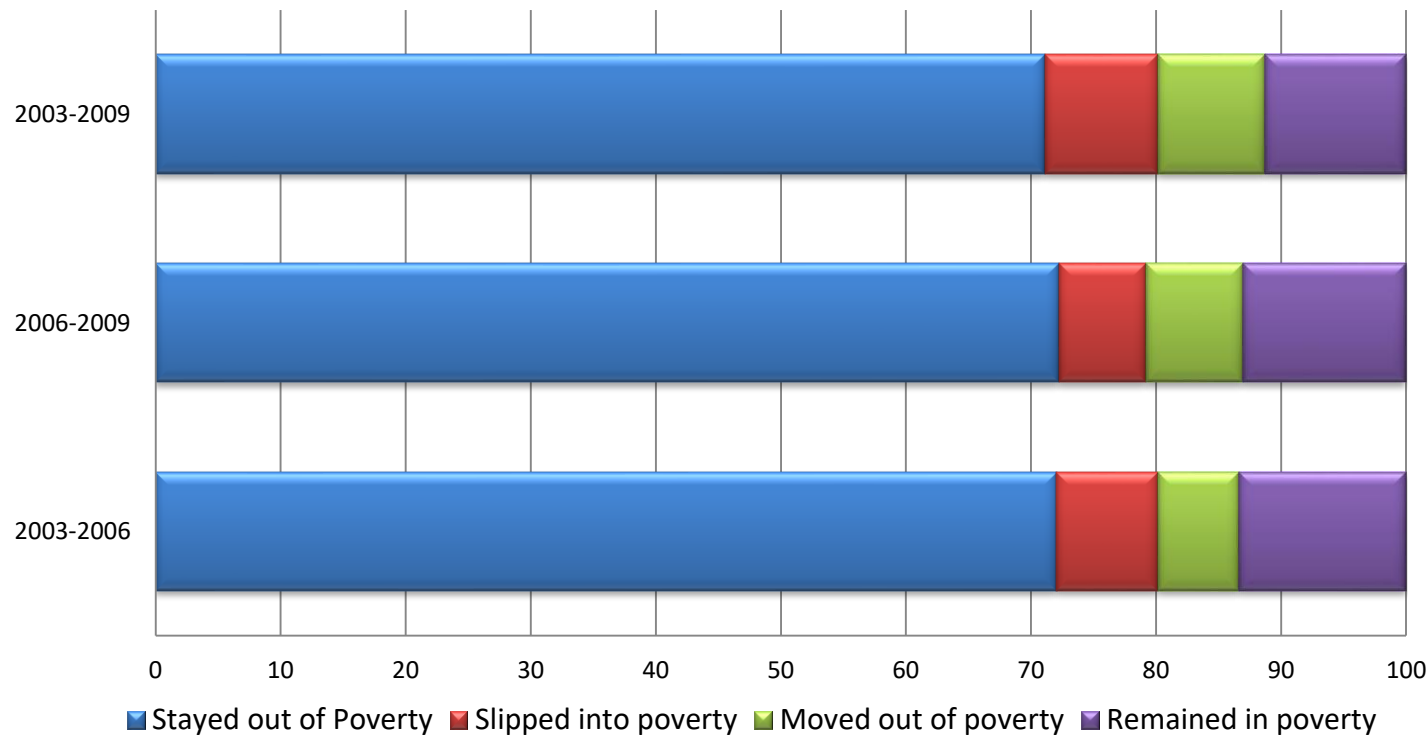
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1.1 Poverty and Vulnerability

- Reduction of poverty is at the heart of the development agenda both nationally and globally (especially in the wake of SDGs)

Poverty Dynamics of Households: 2003 – 2006; 2006-2009 and 2003-2009 (as a % of Households in Base Year)



- In PH, a huge % of HHs move in and out of poverty (Reyes and Albert, 2018)
- Vulnerability to poverty should also be examined and given policy attention
 - Poor households likely to stay poor
 - Non-poor households also at risk of becoming poor
- Information on who is poor today should be a guide about those who will be poor next year only if people are persistently poor

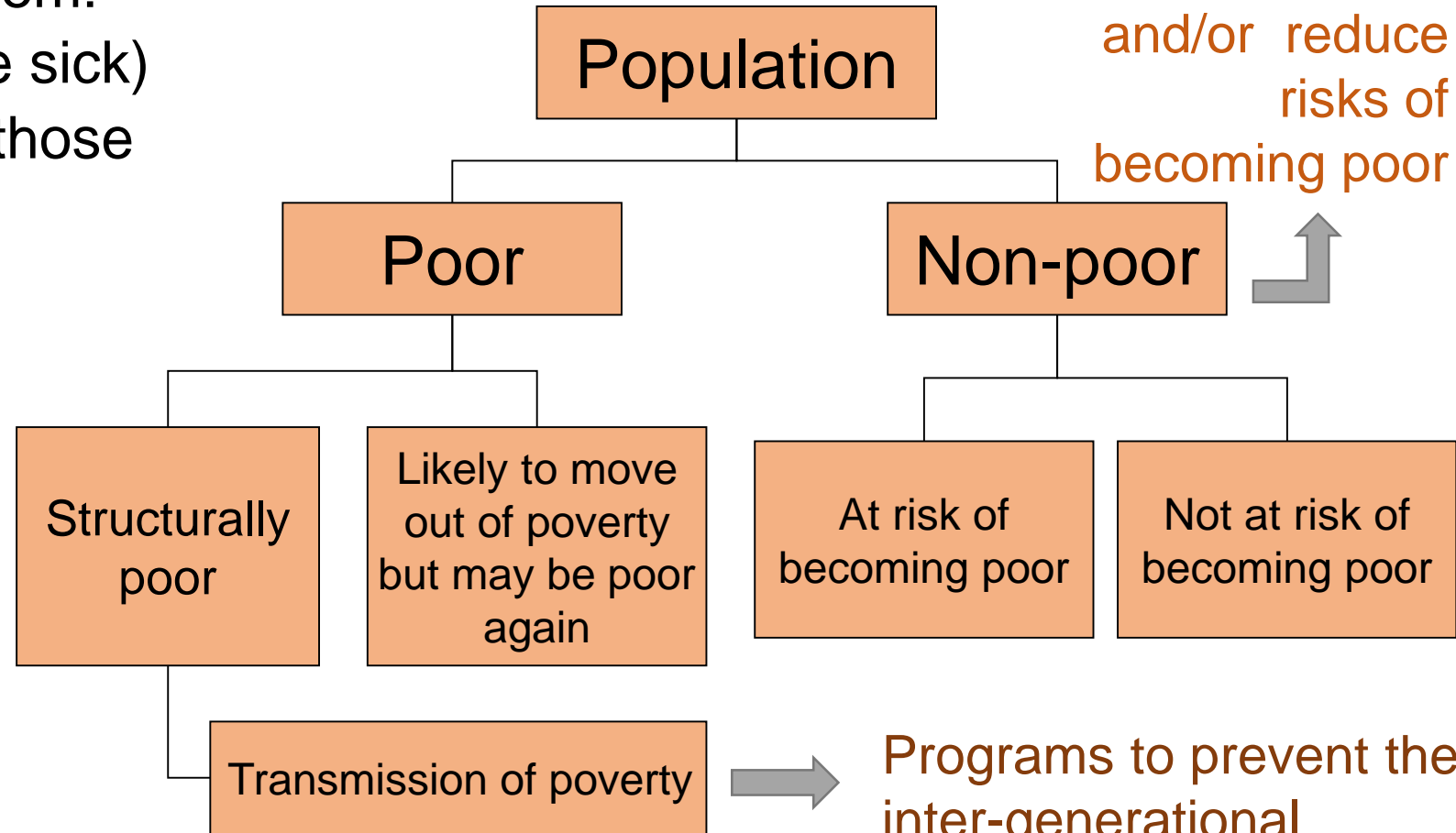
Source: Calculations from FIES 2003-2009 panel

1.2 Policy Interventions for the Poor

- Poverty is like a disease.
- Approaches to the problem:
 - Curative (treating the sick)
 - Preventive (treating those at risk of getting sick)

PREVENTIVE:
Programs such as social protection that build resilience and/or reduce risks of becoming poor

CURATIVE:
Poverty alleviation programs that mitigate adverse effects of poverty



Programs to prevent the inter-generational transmission of poverty

2.1 Measuring and Analyzing Vulnerability

- Chaudhuri (2003) Methodology

define vulnerability as:

$$V_{ht} = \Pr(Y_{h,t+1} \leq Z_h)$$

where

$Y_{h,t+1}$ is the household's per capita income at time t+1

Z_h is the poverty line (for the household)

Income modeled as: $\ln Y_h = \mathbf{X}_h \beta + \mathbf{e}_h$

Y_h is per capita income

\mathbf{X}_h represents a bundle of observable characteristics

β is a vector of parameters

\mathbf{e}_h is a mean-zero disturbance

Assumption: $\sigma^2_{e,h} = \mathbf{X}_h \theta$

2.1 Measuring and Analyzing Vulnerability (cont'd)

Some Definitions:

POOR

Per Capita Income < Poverty Threshold

VULNERABLE

$V_h >$ National Poverty Rate

HIGHLY VULNERABLE

$V_h > 50\%$

RELATIVELY VULNERABLE

$50\% > V_h >$ Poverty Incidence

Variables used in the model:

- Number of young dependents in the household (HH)
- Proportion of HH members aged ≥ 15
- Characteristics of HH head
 - Educational attainment
 - Age and age squared
 - Major sector of employment
 - Whether or not self-employed
- Characteristics of housing unit
 - Tenure status of house and lot
 - Materials of roof and walls
 - Electricity
- Region where HH resides
- Price fluctuations in the market
- Presence of strong storm signals

2.2 Results of 2003-2009 FIES Panel

Vulnerability of HHs in 2003 by Income Groups in 2006 and 2009

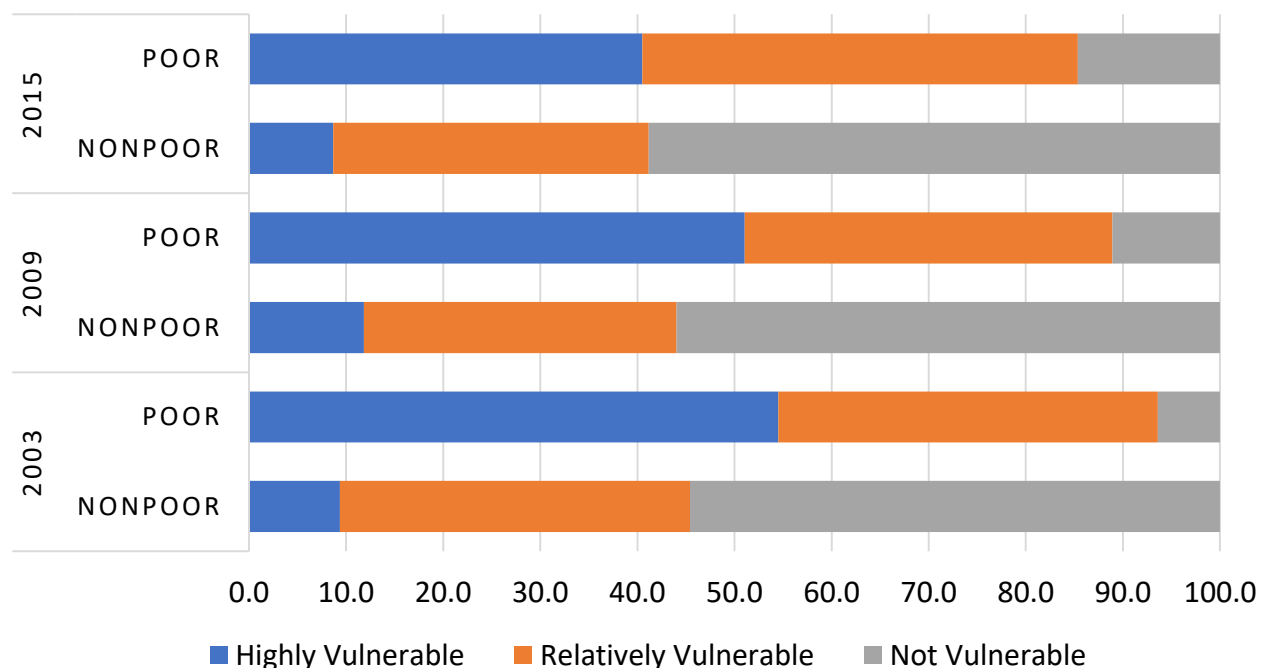
Income Level	Vulnerability Status (2003)			
	HV	RV	NV	Total
Poor in both 2006 and 2009	60.7	34.9	4.3	100.0
Poor in 2006; low income but not poor in 2009	37.2	50.3	12.5	100.0
Poor in 2006; not low income in 2009	27.5	50.7	21.9	100.0
Low income but not poor in 2006, poor in 2009	24.7	56.6	18.7	100.0
Low income but not poor in both 2006 and 2009	16.2	53.6	30.2	100.0
Low income but not poor in 2006, others in 2009	8.0	42.0	50.1	100.0
Not low income in 2006, poor in 2009	15.6	56.3	28.1	100.0
Not low income in 2006; low income but not poor in 2009	6.1	37.0	56.9	100.0
Not low income in both 2006 and 2009	2.2	18.0	79.9	100.0
TOTAL	17.8	35.5	46.7	100.0

The model has strong predictive power of identifying future poor households.

- Among HHs poor in 06 and 09, 60% were HV and 35% RV in 03;
- Among HHs poor in exactly 1 year, at least half were RV
- HHs with changing income levels in 06 and 09 were mostly RV in 03
- Four-fifths of HHs that were not low income in 2006 and 2009 were not vulnerable in 2003

3.1 Trends in Vulnerability (Poverty Status)

Incidence Of Household Vulnerability By Poverty Status: 2003, 2009, 2015

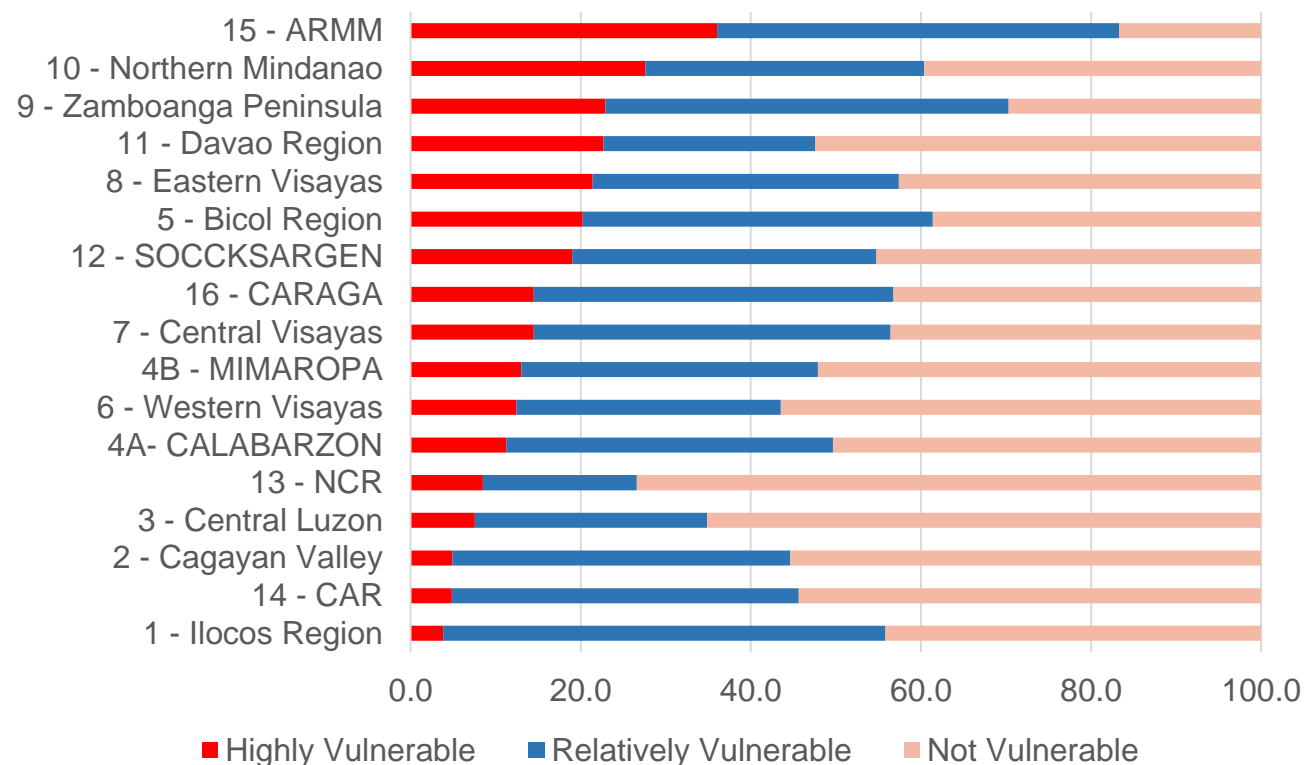


- Across the years, the proportion of households vulnerable to poverty has been around double to triple the official incidence of households in poverty
- Vulnerability rates declined from 55.1% in 2003 to 48.5% in 2015. Proportion of poor households that are HV declined from 54.5% in 2003 to 40.5% in 2015

3.1 Trends in Vulnerability (Regions)

- ARMM most vulnerable region (88.2%)– about half of HHs are HV
- Ilocos Region has lowest HV rate among regions but 57% of its HHs are RV
- NCR and Central Luzon are the only regions with (overall) vulnerability rates below 40%

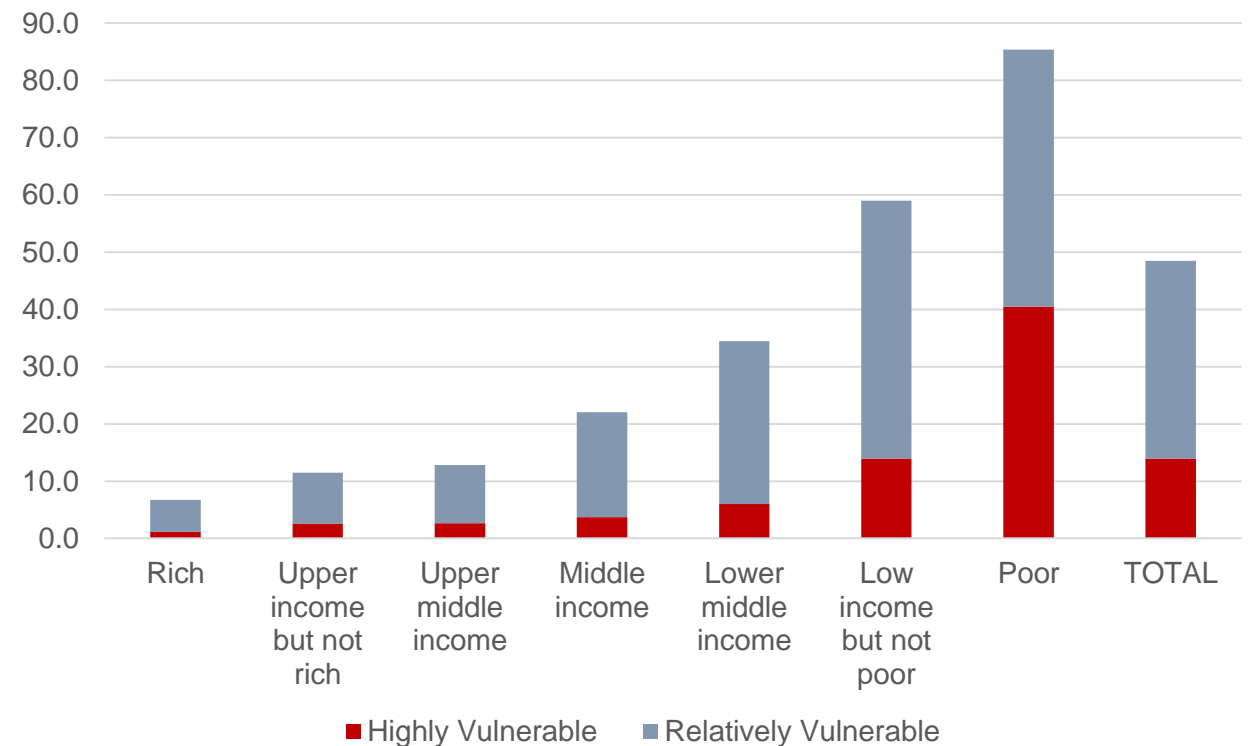
Incidence of Household Vulnerability By Region: 2015



3.2 Profile of Vulnerable Households (Income Groups and Income Sources)

- Incidence of vulnerability decreases as you climb up the income group ladder
- Vulnerability rate of lower middle income HHs are about half that of low income (not poor) households
- Upper Income (not rich) and Rich HHs are practically not highly vulnerable; only 5% are considered RV

Proportion of Households that are Highly Vulnerable and Relatively Vulnerable, by Income Groups: 2015



3.2 Profile of Vulnerable Households (Main Source of Income)

Highly Vulnerable Income Sources: (HV \geq 50%)

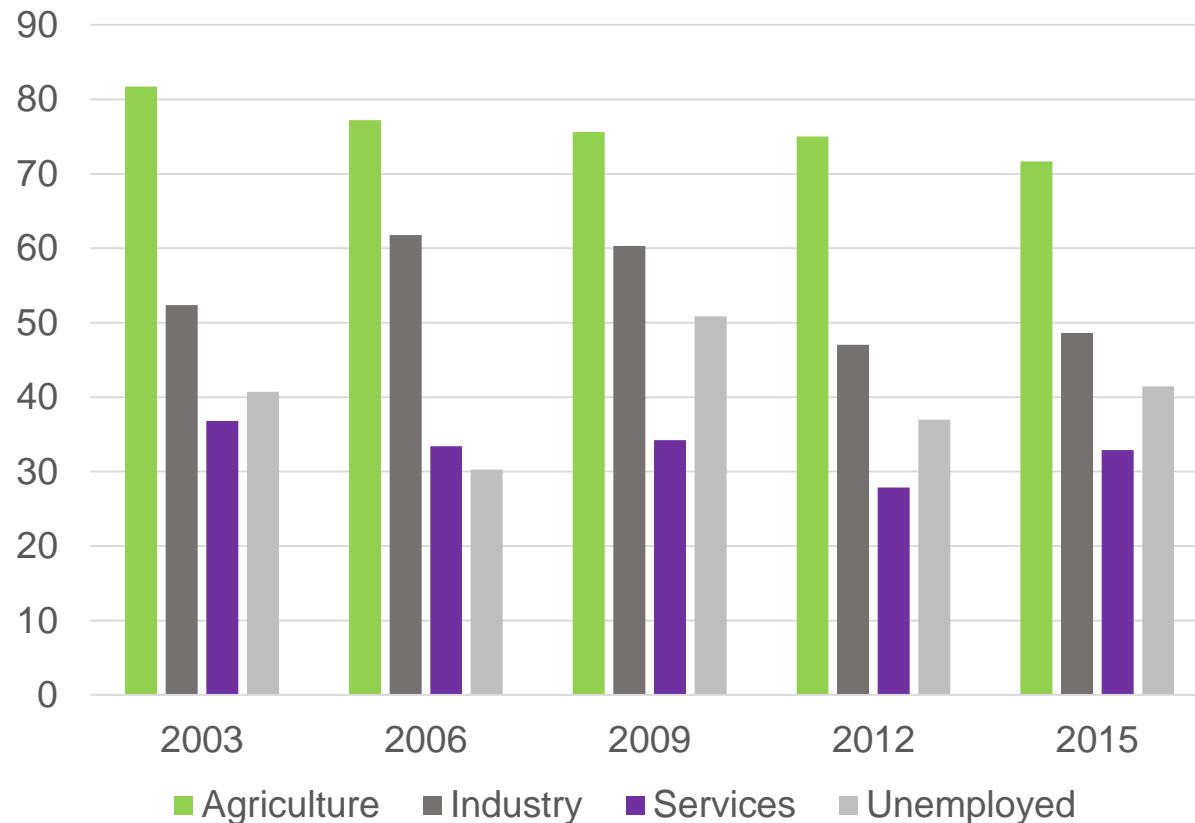
- Fishing
- Forestry
- Mining
- Income from family sustenance activities

Least Vulnerable Income Sources: (NV \geq 50%)

- Wage/Salary from non-agri activities (55.1)
- Construction (54.7)
- Entrepreneurial activities NEC (67.0)
- Assistance from abroad (56.6)
- Rental of lands and other activities (75.6)
- Interests from banks (60.5)
- Pensions and retirement benefits (66.0)
- Dividends from investments (100.0)
- Rental value of owner-occupied dwelling units for income (60.6)
- Other income (57.4)

3.2 Profile of Vulnerable Households (Major Sector of Employment of Head)

Household Vulnerability Rates by Major Sector of Employment of the Household Head: 2003, 2006, 2009, 2012, 2015



- Vulnerability of HHs with heads in agriculture declined (83% in 2003 to 72% in 2015) but still highest among sectors; HHs with heads in services least vulnerable
- About half of HHs with unemployed heads are vulnerable (much lower than those dependent on agriculture). Having jobs is not enough but quality of jobs is an issue.

3.2 Profile of Vulnerable Households (Educational Attainment of Head)

Highest Educational Attainment	Highly Vulnerable	Relatively Vulnerable	Not Vulnerable	Total
None	53.2	24.8	22.0	100.0
Some elementary to elementary graduate	20.1	46.0	34.0	100.0
Some high school to high school graduate	10.9	33.1	56.0	100.0
Some college and beyond	5.1	19.6	75.3	100.0
Total	13.9	34.5	51.5	100.0

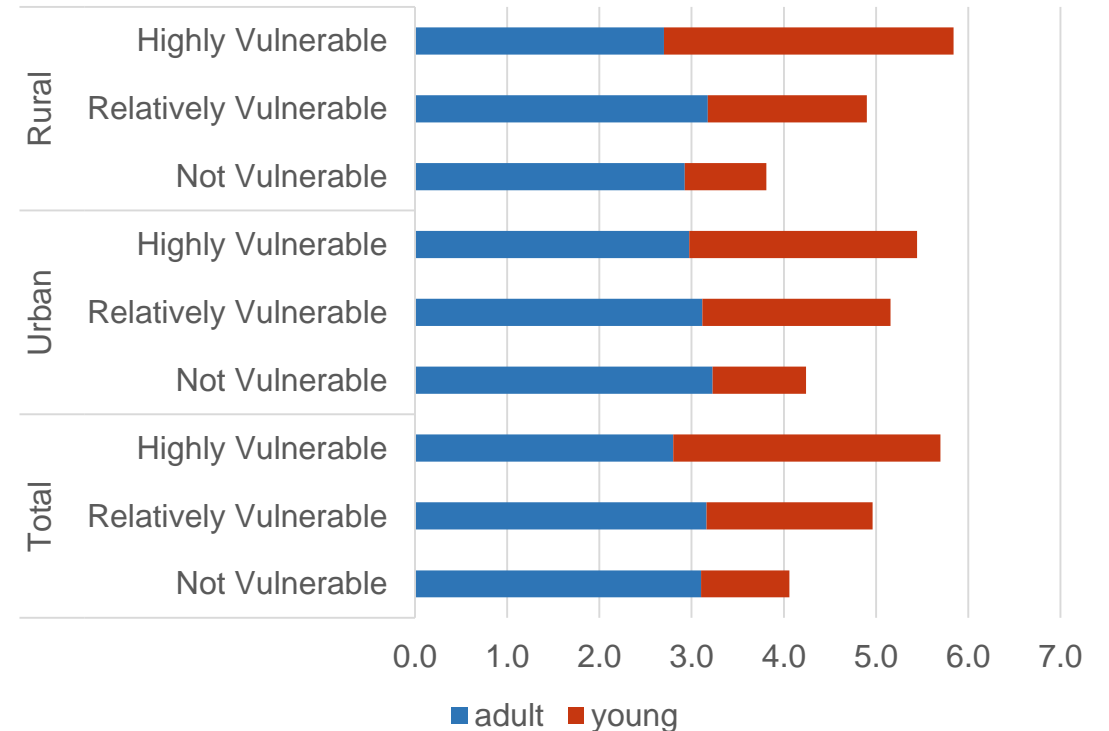
- Vulnerability rate drops with increasing educational attainment of HH head
- About four-fifth (78%) of HHs with heads who had no education are vulnerable
- Only a third of HHs with heads who at least attended college are vulnerable to poverty.

3.2 Profile of Vulnerable Households (Average Number of Young and Adults)

- HV households in rural areas have larger family sizes than in urban
 - Slightly more young members than adults for HV households in rural
- About twice as many adults than young for RV households
- More than 3x the number of adults than young for households identified as not vulnerable

Issue: demographic patterns contribute to further risk

Average Number of Young and Adult Members in Urban and Rural Areas by Household Vulnerability Level: 2015



3.2 Profile of Vulnerable Households (OFWs)

Household Vulnerability in 2015 by Presence of an Overseas Filipino Worker

Presence of Overseas Filipino Worker (OFW)	Income Group	Vulnerability Level			
		Highly Vulnerable	Relatively Vulnerable	Non-Vulnerable	Total
Households without an OFW member	Poor	40.7	44.8	14.6	100
	Low Income but not Poor	13.9	44.9	41.3	100
	Low middle income	5.4	27.8	66.8	100
	Rest of Households	2.9	15.4	81.7	100
	Total	14.2	34.7	51.1	100
Households with at least one OFW member	Poor	31.3	51.4	17.3	100
	Low Income but not Poor	15.9	48.0	36.0	100
	Low middle income	10.3	33.9	55.9	100
	Rest of Households	6.5	23.2	70.3	100
	Total	10.7	33.1	56.2	100

3.3 Profile of Vulnerable Individuals (Basic Sectors of Poverty)

Proportion in Poverty and Proportion in Vulnerability for Basic Sectors in 2015

Sector	Poverty Rate (PSA)	Vulnerability Level			
		HV	RV	NV	Total
Women	22.5	18.1	37.9	44.0	100.0
Youth	19.4	14.6	38.4	47.1	100.0
Children	31.4	25.4	41.4	33.2	100.0
Senior Citizens	13.2	7.5	31.5	61.0	100.0
Migrants and Workers Employed in Formal Sector	13.4	11.5	35.0	53.6	100.0
Farmers	34.3	24.7	48.2	27.1	100.0
Fishermen	34.0	33.4	50.5	16.1	100.0
Self-employed and Unpaid Family Workers	25.0	18.3	42.5	39.2	100.0
Individuals in Urban Areas	11.5	14.7	23.2	62.1	100.0
Migrants and Workers Employed in Formal Sector	13.4	11.5	35.0	53.6	100.0

4. Policy Issues and Ways Forward

- A HH is more vulnerable to shocks if it has low levels of human capital: public policies **need** to focus on **risk management**
 - Significant disparities in vulnerability levels evident among subgroups: urban/rural, region, employment sector, educational attainment
 - Households with large family sizes are at a higher risk of becoming poor
- Two sets of intervention for the vulnerable: **protection** from likely **exposure to shocks** and **assistance** for households to **increase** their **incomes** and **assets**.
 - Poverty alleviation and social protection efforts have typically resolved around the formulation and implementation of “one size fits all” strategies (e.g. CCT, [SocPEN](#), UCT for TRAIN Law, [UNICEF’s UCT for Yolanda](#)).
- Important to have a **poverty reduction road map** based on **statistical information** of both the poor and the vulnerable



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2018 PIDS Discussion Paper :

<https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1810.pdf>

2018 PIDS Policy Note:

<https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidspn1816.pdf>

Rappler Article :

<https://www.rappler.com/thought-leaders/210463-poverty-reduction-requires-prevention-and-cure>

Thank you



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